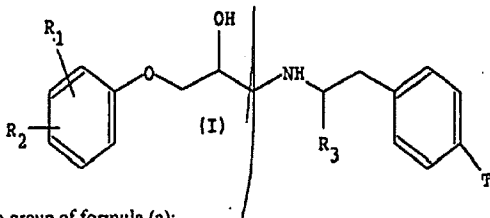


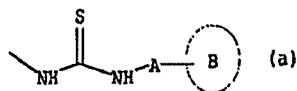
New thiourea derivatives - are beta-3 receptor agonists which
accelerate insulin secretion and elevate insulin sensitivity, useful
for treating diabetes
C98-041612

Thiourea derivatives of formula (I) and their salts are new.



T = a group of formula (a):

B(10-A13B, 14-S4) :2



R₁, R₂ = H, halo, hydroxyl, cyano, nitro, trifluoromethyl, lower
alkoxy, lower acylamino, lower alkylsulphonylamino, lower
alkoxycarbonylamino, N'-lower alkylureido or lower alkyl
(optionally substituted);

R₃ = H or lower alkyl;

A = a bond, lower alkylene or lower alkenylene; and
ring B = optionally substituted aryl or cycloalkyl.

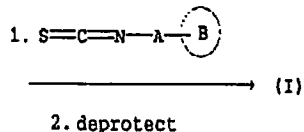
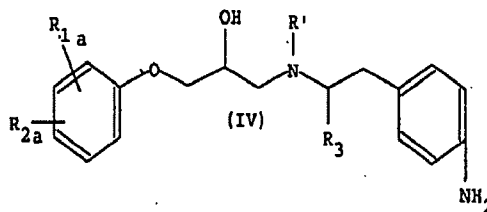
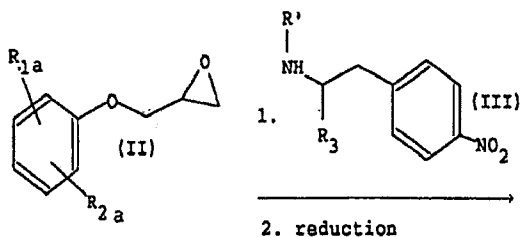
USE

(I) are β-3 receptor agonists and are useful for treating diabetes.
(I) accelerate insulin secretion and elevate insulin sensitivity.

JP 10007647-A+

PREPARATION

E.g.



R_{1a}, R_{2a} = protecting group for R₁, R₂ and OH; and
R' = amino protecting group.

EXAMPLE

(S)-1-[4-[2-[N-t-Butoxycarbonyl-N-(2-hydroxy-3-

JP 10007647-A+/1

98-126135/12

phenoxypropyl)amino]ethyl]phenyl]-3-phenylthiourea (0.33 g)
dissolved in methanol (10 ml) and 4 N hydrogen chloride ethyl acetate
solution (10 ml) were mixed and stirred at room temperature for 1
hour to give 0.17 g (S)-1-[4-[2-[(2-hydroxy-3-
phenoxypropyl)amino]ethyl]phenyl]-3-phenylthiourea (Ia).HCl, m.pt.
214-217 °C. (MHG)
(20pp002DwgNo.0/0)

JP 10007647-A/2